

INDIAN TIMOTHY MEMORIAL BRIDGE
U.S. Route 12 spanning Alpowa Creek
Silcott vicinity
Asotin County
Washington

HAER No. WA-85

HAER
WASH
2-SILC.V
1-

WRITTEN HISTORICAL AND DESCRIPTIVE DATA
PHOTOGRAPHS

HISTORIC AMERICAN ENGINEERING RECORD
NATIONAL PARK SERVICE
DEPARTMENT OF THE INTERIOR
P.O. BOX 37127
WASHINGTON, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD
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Location: U.S. Route 12 spanning Alpowa Creek, Silcott Vicinity, Garfield County, Washington, beginning at mile point 424.99.

UTM: 11/483680/5139620

Quad: Silcott, Wash.

Date of Construction: 1923

Engineer: Washington Department of Highways

Fabricator: Colonial Building Company of Spokane, Washington

Owner: Washington Department of Highways Since 1977 by the Washington State Department of Transportation, Olympia, Washington

Present Use: Bypassed by new bridge and highway alignment, but preserved as a wayside rest and monument.

Significance: The bridge was dedicated to Ta-Moot-Tsoo (Chief Timothy), a Nez Perce Indian (1800-1891) who was friendly with early settlers and was credited with saving the lives of Colonel Edward J. Steptoe's troops in 1858 after their defeat in the Battle of Tohotonimme, near Rosalia. It is a two-span, reinforced-concrete similar in design to the "rainbow arch" popularized by James Marsh in the midwest in the 1910s and 1920s. The bridge has been placed on the National Register of Historic Places.

Historian: Wm. Michael Lawrence, August 1993

History of the Bridge

The Indian Timothy Memorial Bridge was built in 1923 on a portion of the Inland Empire Highway later designated part of U.S. 12. As the route departs Clarkston, Washington, at the confluence of the Clearwater and Snake rivers, it travels southwest, paralleling the Snake. The road climbs away from the river toward Alpowa Summit and where it crossed a creek by the same name, the bridge was built.

A Nez Perce Indian village was located near the mouth of the Alpowa Creek in 1805 and until at least 1890. Among the Native Americans who made their homes there was a Nez Perce chief, Ta-Moot-Tsoo (c. 1800 to 1890 or 1891), baptized Timothy upon his conversion to Christianity. Like many Nez Perce, he was seen by white settlers as friendly and is credited with assisting them in many ways. In 1858, Colonel Edward J. Steptoe and over 150 United States Cavalry men left Fort Walla Walla for Colville to protect miners from attack from hostile Colville and Spokane Indians. On their journey, near latter day Rosalia, they were held at bay and forced to retreat by Spokanes in what became known as the Battle of Tohotonimne. Many whites credit Timothy with rescuing Steptoe and his troops. By the early twentieth century, many in the European-American population campaigned for the construction of a federal monument in his honor but the idea was forgotten during the First World War.

Elgin V. Kuykendall, born into a pioneer family in southeastern Washington, was sympathetic to this cause. Years later as director of the Washington State Department of Public Works in Olympia, which oversaw the then Division of Highways, he was able to get the state to designate the new bridge over Alpowa Creek as the "Indian Timothy Memorial Bridge."¹

The State Highway Engineer's Tenth Biennial Report states that the bridge was one of at least twenty-one "special structures" built during the biennium from 1 October 1922 to 30 September 1924, as opposed to smaller "standard designs" used on state and county routes over numerous crossings. All but two of the special structures were of steel or concrete construction. Seven, including the Indian Timothy Memorial Bridge, were reinforced-concrete arches. As for this particular structure, the Biennial Report states that it was designed to resist sudden and heavy runoffs of Alpowa Creek due to heavy cloudbursts.

The engineers completed plans for the bridge by the spring of 1923, the set of drawings for the structure being approved on 16 April 1923.² This was in time for an application for federal funding on 30 April 1923, as provided for by the Federal Aid Road Act of 1916, as amended. This, Federal Project No. 124 for the year 1923, received U.S. Bureau of Public Roads approval on 23

July 1923.³

In the meantime, the department called for bids, but the *Pacific Builder and Engineer* reported that on 31 July 1923, the state rejecting the proposal made by Robert Myer in Clarkston, at \$18,865, as irregular. The other bidders were the Colonial Building Company of Spokane at \$35,120, Sam Boudrye at \$35,365, and W. A. Byers & Company at \$36,439.⁴ The state and the low bidder signed the contract on 2 August 1923, with a price of \$35,120. The Colonial Building Company began the work shortly after, on 9 August. Concrete pours began around 28 September. While the bridge was being built, the state decided on the design of the two bronze plates and their location on the railings flanking the approach, each simply emblazoned with the name "Indian Timothy Memorial Bridge," in November. Colonial Construction Company completed the concrete pours by around 7 May 1924. The state awarded contracts for the approaches on 16 June and 20 June 1924, to the Colonial Construction Company for concrete retaining walls and Tony Marrazzo, of Pomeroy, for the roadbed with its supporting embankments. The contractors completed this work by 20 August.⁵

The Pacific Coast Steel Company supplied the reinforcing bars and used a picture of the bridge in a two-page advertisement in the 6 December 1924 issue of *Pacific Builder and Engineer*. The advertisement claims that the bridge was the first concrete through arch built in the state of Washington. This may not necessarily so, as two other concrete through arches were being built at the same time over the Hamma Hamma river.⁶ It also stated that the highway department was building several reinforced-concrete bridges because they required "NO" maintenance.⁷ If this was a popular opinion at the time, it was a rather naive one, for concrete can deteriorate.

The bridge continued in service until 1974, when rising waters behind the U.S. Army Corps of Engineers' Lower Granite Dam on the Snake River created the need to realign nearby portions of the highway. The state highway department replaced the bridge with a parallel structure. The Indian Timothy Memorial Bridge still stands, as a weyside rest and monument to Indian Timothy. It is also a surviving example of the type it represents, the reinforced-concrete through-arch bridge.

Design and Description

The Indian Timothy Memorial bridge is an example of a reinforced-concrete through-arch, sometimes known as a "rainbow arch," popularized by James Marsh, a Des Moines, Iowa, engineer, in the 1910s and 1920s. Its arches are fixed, without hinges or ties between the skewbacks. Although it was one of the Washington

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Department of Highways' "special designs," it is similar to other concrete through arches that it built in the same year. It differs, however, in that its ornamentation is more elaborate.

As already indicated, the Biennial Report states that one assumption the engineers based their design on was that the need to resist flash floods in the Alpowa Creek. This may account for the use of two arches rather than one with longer approaches, to assure that clearances under the bridge would not impede flood waters.

Drawings for this bridge survive, making it possible to describe and analyze its structure.¹ According to the drawings, the bridge is 22'-6" wide, center-to-center of the arches, with a 20' wide roadway. A system of stringers and floor beams support the deck. The floor beams are suspended by hangers from the arches, except at the ends, where they rest on the central pier or the walls in front of the abutments. The half-through ribbed arches are in two spans each at 100' from skewback to skewback and a rise of 20' from the skewback to the crown of the arch at its centerline. The arches rest on the central pier with the skewbacks 12" from each other and on concrete abutments at the ends of the bridge, giving the structure a total length of 201'. At each end the abutments and the infill surrounding them are enclosed by reinforced concrete walls on three sides, with one wall facing the channel, and the two wing walls flanking the approach. The approach slab rests on the walls and is approximately 18' long. Cast in place reinforced-concrete railings run along the entire length of the two spans and the approaches. All parts of this bridge are of reinforced concrete construction.

The drawings also indicate that the 8" thick deck rests on four rows of stringers and floor beams at every point, being 7'-1" on center. The stringers are 10" x 8" wide, while the beams are 22-1/2" x 18". The beams frame into 12" x 16" concrete hangers suspended from the arch ribs above.⁹ The dimensions of many of the parts are similar to those of the Hanna Hanna River bridges (HAER Nos. WA-96 and WA-97), also built in 1923.¹⁰

The use of fixed arches results in special details in the deck of this structure. The floor is not continuous. At each of the outermost hangers, which are so short as to not appear to be hangers at all, a 1/2" expansion joint with asphaltic filler separates the floor and the stringers within the arch from the rest of the deck and the cross beam at this panel point. The deck and their supporting stringers rest on a shelf cut into this beam. Tar paper laid on the shelf prevented any bond with the beam when the concrete was poured.¹¹ The expansion joint continues up along the underside of the arch, separating the

curbs and railing from the arch as well.¹²

Since this is a fixed or encasté arch bridge, the outward thrusts of each arch are counteracted by the mass of the pier or abutment at each end. Although the floor structure hangs from the arch, it does not help resist such forces, as in a tied arch. The clean separation of the floor, its supporting members, the curb, and the railing from the arch ribs allows them to expand and contract horizontally, and the arch ribs to do so vertically.

The deck from the arch to the central pier is similarly separated from and supported by the central pier. The floor beam closest to the center line of the pier rests at its end on the pier with a tar paper bond breaker preventing the beam and the pier from being monolithic. There is another 1/2" expansion joint in the deck and railings, at the centerline of the deck and pier.¹³ This enables the end of the floor to move on its bearing point at the pier, as the floor and the arch expand and contract.

The situation at the wall above the abutments is different. The floor is monolithic with the arch and rests at the end away from the arch on the top of the wall above the abutments, yet is separated from the wall by tar paper.¹⁴ This wall is monolithic with the arches where they pass through it. A vertical expansion joint separates the floor from the approach roadway, the railings and curb on the floor from that along the approach, and the wall below from the wing walls flanking the approach.¹⁵ With this joint and the bond breaker, the deck, curb and railing can move horizontally as they expand and contract and as the arch moves.

To summarize, the arch supports the floor, but the floor does not help resist the outward thrust of the arch in any way. A system of expansion joints and bond breakers (the tar paper) prevents the floor from doing this and accommodates expansion and contraction due to changes in temperature.

Such joints and bond-breakers were used in other reinforced-concrete through ribbed arches designed by the Washington State Highway Department in the same year, namely the Hama Hama River bridges. The location of the joints and bond breakers differs, however, since these two structures are three-hinged arches.¹⁶ The Goldsborough Creek bridge, also designed by the highway department in 1923 and quite similar to these bridges in many ways, also uses this system.¹⁷

The arch, the main compressive member of the bridge, is not an arc but instead a parabola. Its minimum dimension, from extrados to intrados, is 2'-3" at the crown, and it flares out to approximately twice that depth near the springing points, while its width is a constant 2'.¹⁸ Although it does improve the

appearance of the bridge, the flare is not necessarily an aesthetic feature, but increases the mass of the arch at the skewbacks, resisting the moment forces at these points. The arch is similar in its form to that of the Goldborough Creek bridge.¹⁹ The massive, solid concrete central pier is 30' across, 7' thick at the base, and approximately 12' high from the top of the footing to the bearing points of the floor beams above. Its ends are rounded, offering less resistance to the flow of the creek than a rectangular pier. The footing it bears on is 4' high by 36' by 12'.²⁰ According to the Biennial Report, these rest "on heavy boulder foundation."²¹ The faces of the pier are battered, at a 1:12 ratio. The engineers may have intended this to be an aesthetic effect, to lower the center of gravity and increase the stability of the pier, or both. The great weight, low center of gravity, and solid bearing could all be part of what the report called "the special care [that] was taken in the design to resist sudden and heavy run-off."²²

According to the drawings, steel reinforcing in each floor beam is located in the lower part of the beam, all bars having hooks at their ends, to resist the tension forces in that lower zone. Bars in the hangers have hooks on their ends as well.²³ These were spread within the arch at their upper ends to enhance their ability to carry the load of the floor below. The reinforcing bars in the arch were concentrated near the extrados and intrados. Hoops surround the bars, to hold them in position before and during the concrete pours and to resist shear stresses. The reinforcing is quite similar to that of the Hanna Hanna River bridges and the Goldsborough Creek bridges.²⁴ The drawings called for the concrete to be placed in a series of pours, with shear keys at the construction joints, from the footings on up to the crown, followed by the railings, with one exception. The arch, from the points where it passes the floor to the point where it meets the next hanger, was to be poured after the hangers and the crown section above.²⁵ The engineers might have stipulated this to accommodate shrinkage of the concrete during setting and hardening, elastic compression in the arch during dead loading, and settlement of the abutments under the arch thrust. The sequence of pours is quite similar to that stipulated for the Hanna Hanna River bridges and the Goldsborough Creek bridge.²⁶ For some reason, however, the contractors did not use this method during the actual construction of the bridge, for a record of the concrete pours indicates that they poured the arches from the footing up to the crown without leaving a "key section" and coming back to pour them.²⁷

The engineers included several features to make the bridge more attractive. The top of the battered pier terminates in a 2' high coping surmounted by a conical cap. The railing is in the form of a balustrade, with arched openings in those parts built over

the spans. Grooves in the arches and the railing decorate their surfaces with rectangular patterns. Overall, the bridge has a vaguely classical appearance. Some of these features were probably derived from masonry arched bridges of earlier times. Many of the details and techniques used in the design and construction of this bridge are similar to those at other bridges built by the Washington State highway department at the same time. The Indian Timothy Memorial and Goldsborough Creek bridges, like the Hamma Hamma River bridges, are also reinforced-concrete through ribbed arches with the deck hung from the arches. The three bridges are similar in the forms and even in the dimensions of some of their members. The Biennial Report lists these structures as special designs, but the three are similar in many ways, suggesting that even in special situations, the engineers used a great deal of standardization.

Repair and Maintenance

The bridge has stood up well, with minor cracking and some spalling which inspectors did not regard as important enough to repair. The bridge was bypassed with a new bridge constructed in 1974 as part of a new roadway alignment.²⁸ Rather than demolish it, the state decided to maintain the old structure as part of a wayside rest and a historical monument.

Data Limitations

Elgin V. Kuykendall, the man who played a key role in the dedication of the bridge to Indian Timothy, wrote *Historic Glimpses of Asotin County*, in 1954, which included an account of Indian Timothy's life and explained why the bridge was named after him. A search through professional journals such as the *Engineering News-Record* failed to uncover any articles specific to the bridge. Engineers and highway departments were building many reinforced-concrete arch bridges at the time, and the journals concentrated on larger, more impressive examples of this structural type. The *Tenth Biennial Report of the Washington State Highway Engineer and Pacific Builder and Engineer* provided contractual information and dates. Drawings surviving at the Washington State Department of Transportation made it possible to describe and analyze the structure. Searches of newspaper clipping files discovered no articles concerning the bridge when it was built. These files, which contained articles concerning many other bridges, are located at the Washington State Library at Olympia, the Seattle Public Library, the Washington State Historical Library at Tacoma, the Museum of History and Industry in Seattle, and the Special Collections Room at the University of Washington Library in Seattle.

Project Information

This project is part of the Historic American Engineering Record (HAER), National Park Service. It is a long-range program to document historically significant engineering and industrial works in the United States. The Washington State Historic Bridges Recording Project was co-sponsored in 1993 by HAER, the Washington State Department of Transportation (WSDOT), and the Washington State Office of Archeology & Historic Preservation. Fieldwork, measured drawings, historical reports, and photographs were prepared under the general direction of Robert J. Kapsch, Ph.D., Chief, HABS/HAER; Eric N. DeLony, Chief and Principal Architect, HAER; and Dean Herrin, Ph.D., HAER Staff Historian.

The recording team consisted of Karl W. Stumpf, Supervisory Architect (University of Illinois at Urbana-Champaign); Robert W. Hadlow, Ph.D., Supervisory Historian (Washington State University); Vivian Chi (University of Maryland); Erin M. Doherty (Miami University), Catherine I. Kudlik (The Catholic University of America), and Wolfgang G. Mayr (International Council on Monuments and Sites/Technical University of Vienna), Architectural Technicians; Jonathan Clarke (ICOMOS/Ironbridge Institute, England) and Wm. Michael Lawrence (University of Illinois at Urbana-Champaign), Historians; and Jet Lowe (Washington, D.C.), HAER Photographer.

APPENDIX

Ta-Moot-Tsoo, known as Indian Timothy:

The Indian Timothy Memorial bridge was named after Ta-Moot-Tsoo, or Chief Indian Timothy, a Nez Perce who was born around 1800 and died in 1890 or 1891. The Nez Perce showed great hospitality to the white settlers upon their arrival in eastern Washington State and Indian Timothy was a most notable example.

In his 1954 *Historic Glimpses of Asotin County*, Elgin V. Kuykendall included an account of the man's life, largely based on accounts by pioneers who settled the southeastern part of Washington in the late 19th century, many of whom knew the man, who were still alive at the 20th century and could pass on stories about Timothy to the author.

According to this oral history, as told by Kuykendall, Ta-Moot-Tsoo was present when Lewis and Clark arrived at Alpowa village, just below the mouth of the Alpowa Creek, on 11 October 1805. Late in life he would tell his white friends that he was frightened and he watched these strangers while hiding himself behind rose bushes. Ta-Moot-Tsoo may also have witnessed a second visit by the expedition, on 4 May 1806.²⁹

Reverend Henry Spalding, a missionary, arrived in the Alpowa area in 1836 and converted many of the Nez Perce to Christianity. Ta-Moot-Tsoo is said to be his first convert. The name Alpowa, the village where Ta-moot-Tsoo made his home, incidently, means "place of rest" or Sabbath. Tina, the wife of Ta-Moot-Tsoo, is supposed to have given the village its name. Spalding gave Ta-Moot-Tsoo his baptismal name, Timothy.³⁰

Several accounts regarding Timothy survive. According to one, the Cayuse Indians captured Spalding's ten-year-old daughter, Eliza, during what became known as the Whitman massacre at Walla Walla. Spaulding escaped from this battle and fled to Alpowa, wondering if Timothy would remain his friend and convert. He stopped outside his home only to overheard him praying for Spaulding's safety.³¹ Timothy, by means of threats and persuasion, won Eliza's release.

Timothy's contemporaries and later generations remembered him most for his role in the ill-fated Steptoe expedition in 1858. Several hundred miners and settlers in the Colville country signed and sent a petition to Colonel Edward J. Steptoe at the U.S. Cavalry's Fort Walla Walla, requesting protection from raids by the Colvilles and Spokanes. Steptoe led an expedition of 157 soldiers and several Nez Perce scouts to the area to try to negotiate peace with the Indians. On the way, he traveled down

the Nez Perce trail, past the future site of the Indian Timothy Memorial bridge, and arrived in Alpowa in May, where Timothy joined the expedition as a scout. Upon his arrival in the area of the present town of Rosalia, he found himself faced with approximately 1,000 warriors of the Spokane, Palouse, and Coeur d'Alene tribes. The result was a confrontation, the Battle of Tohotonimne, lasting several days, with the cavalry attempting a retreat, around 17 May. Steptoe soon found himself and his men surrounded. Timothy led the troops to an escape route through an unguarded defile or gulch. Upon their return to Alpowa, Ta-Moot-Tsoo's people fed the soldiers and tended to the wounded.³²

Timothy's efforts on behalf of the whites did not endear him with many other Indians. According to one account, in 1859 a member of the Cayuse tribe purchased a keg of whiskey, visited one of Timothy's sons, got him drunk, and killed him.³³

Some historians have expressed some doubts regarding Timothy's role in the Battle of Tohotonimne, as Steptoe did not mention it in his report, but according to Kuykendall, survivors of the expedition repeated the story in later years, with one giving sworn testimony concerning the matter that was sent to Senator Wesley L. Jones, who introduced a bill in congress just before World War I, to build a monument near the highway on Timothy's homestead, at a cost of \$25,000.³⁴

Judge Elgin V. Kuykendall, who provided this information in his 1954 history of Asotin County, long felt that Timothy should be memorialized for his service to the whites:

"When I was director of the department of public works at Olympia, the highway bridge across the Alpowa near its mouth was constructed, and I was able to have it designated in the statute authorizing its construction as 'Indian Timothy Memorial Bridge.' A bronze placque [sic] was placed at each end of the structure bearing that inscription. Our recognition of Timothy should not end there. An effort should be made for the erection of an imposing monument to his memory."³⁵

Today, the highway bypasses the reinforced-concrete arch, crossing Alpowa Creek on a new span, but the Indian Timothy Memorial Bridge still stands as a monument to Ta-moot-Tsoo.

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[Record of concrete pours at the Indian Timothy Memorial
Bridge"] (dates from 28 September 1923 to 7 May 1924). 1
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ENDNOTES

¹ Kuykendall would later put the down in writing stories concerning Timothy which were handed down by white settlers who knew of him. For a summary of this account, see Appendix I; Memorializing Timothy with the bridge must have taken place before 16 April 1923, when the bridge department finished the drawings, for they bear that designation. See Washington Department of Public Works, Division of Highways, "Indian Timothy Memorial Bridge Half Through Concrete Arch" (approved 16 April 1923), 3 sheets of drawings, held by the Records Control, Washington State Department of Transportation, Olympia, WA [WSDOT].

² Washington Department of Public Works, Division of Highways, "Indian Timothy Memorial Bridge Half Through Concrete Arch."

³ Washington Department of Highways, Tenth Biennial Report of the State Highway Engineer, 68 & 124.

⁴ Construction News, "Pacific Builder and Engineer 29 (3 August 1923): 2. The journal did not explain why the lowest bid was irregular.

⁵ "Call for Bids," Pacific Builder and Engineer (6 July 1923), 5; Washington Department of Highways. Tenth Biennial Report of the State Highway Engineer, 68; these are the earliest and latest dates for concrete pours in a record drawing surviving at the Washington Department of Highways archives. Washington Department of Public Works, Division of Highways, [Record of concrete pours at the "Indian Timothy Memorial Bridge"] (dates from 28 September 1923 to 7 May 1924), 1 sheet of drawings; "Name Plates for the Indian Timothy Memorial Bridge--Inland Empire Highway" (approved 8 November 1923), 1 sheet of drawings, both held by Records Control, WSDOT; Washington Department of Highways, Tenth Biennial Report of the State Highway Engineer, 68-69.

⁶ See "North Hamma Hamma River Bridge, HAER No. WA-97" and "South Hamma Hamma River Bridge, HAER No. WA-96," by Wm. Michael Lawrence, 1993, held by Historic American Engineering Record, National Park Service, Department of the Interior.

⁷ Pacific Coast Steel Company, "As permanent as the hills--A Memorial to an Indian," Pacific Builder and Engineer 30 (6 December 1924): 19.

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⁸ Washington Department of Public Works, Division of Highways, "Indian Timothy Memorial Bridge Half Through Concrete Arch."

⁹ Ibid.

¹⁰ See "North Hamma Hamma River Bridge, HAER No. WA-97" and "South Hamma Hamma River Bridge, HAER No. WA-96."

¹¹ Washington Department of Public Works, Division of Highways, "Indian Timothy Memorial Bridge Half Through Concrete Arch," sheet 3, Section E-E1.

¹² Ibid., half section at centerline.

¹³ Ibid., half section at centerline and section D-D.

¹⁴ Ibid., half section at centerline and section B-B.

¹⁵ Ibid., sheet 2, half elevation and horizontal section at base.

¹⁶ See "North Hamma Hamma River Bridge, HAER No. WA-97" and "South Hamma Hamma River Bridge, HAER No. WA-96."

¹⁷ Washington Department of Public Works, Division of Highways, Drawings for the Goldsborough Creek bridge (approved 1923), held by Records Control, WSDOT.

¹⁸ Washington Department of Public Works, Division of Highways, "Indian Timothy Memorial Bridge Half Through Concrete Arch," sheet 2, half elevation.

¹⁹ Washington Department of Public Works, Division of Highways, Drawings for the Goldsborough Creek bridge (approved 1923).

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²⁰ Ibid., sheet 3, half section at centerline and half horizontal oection at top of coping.

²¹ Washington Department of Highways, *Tenth Biennial Report of the State Highway Engineer*, 68.

²² Ibid.

²³ Washington Department of Public Works, Division of Highways, "Indian Timothy Memorial Bridge Half Through Concrete Arch," sheet 3, half section on centerline and section B-B; sheet 2, bar list.

²⁴ See "North Hamma Hamma River Bridge, HAER No. WA-97" and "South Hamma Hamma River Bridge, HAER No. WA-96"; Washington Department of Public Works, Division of Highways, Drawings for the Goldsborough Creek bridge.

²⁵ Washington Department of Public Works, Division of Highways, "Indian Timothy Memorial Bridge Half Through Concrete Arch," sheet 3, pouring diagram.

²⁶ See "North Hamma Hamma River Bridge, HAER No. WA-97" and "South Hamma Hamma River Bridge, HAER No. WA-96"; Washington Department of Public Works, Division of Highways, Drawings for the Goldsborough Creek bridge.

²⁷ Washington Department of Public Works, Division of Highways, "Indian Timothy Memorial Bridge Half Through Concrete Arch," sheet 3, pouring diagram.

²⁸ "Indian Timothy Memorial Bridge, No. 12/903," Kardex Card File and Bridge Inspection Reports, Bridge Preservation Section, WSDOT.

²⁹ Elgin V. Kuykendall, *Historic Glimpses of Asotin County, Washington. With Supplement of Myths, Legends, and Curious Beliefs of Indians of the Northwest* (Clarkston, WA: Clarkston Herald, 1954), 3.

³⁰ Ibid., 14.

³¹ Ibid., 14-5. Professor N.J. Aiken of the State College of Washington related the story about Timothy praying for Spaulding's safety.

³² Ibid., 3.

³³ Ibid., 17.

³⁴ Ibid.

³⁵ Ibid.